AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A stylet having a proximal end and a distal end for use with a medical stimulating lead, the stylet comprising:

a handle disposed at the proximal end;

an outer covering that is a tube spanning from the handle to the distal end, made of a metal outer covering material and being constructed to have a solid annular lateral cross-section; and

a solid inner core surrounded by the outer covering from the handle to the distal end, made of inner core material, the inner core inside the outer covering, the inner core having a solid lateral cross-section,

wherein the outer covering material and inner core material have different elastic and buckling properties.

2. (Original) The stylet of claim 1, wherein the outer covering material is a super-elastic material, which outer covering material is substantially more resistant to permanent bending deformation than the inner core material; and wherein the inner core material is a linear elastic material, which inner core material is substantially more resistant to buckling than the outer covering material.

3. (Original) The style of claim 2, wherein the inner core material is selected from the group consisting of cold drawn 304 stainless steel, 316 stainless steel, 316L stainless steel; and wherein the outer material is nitinol (425 nickel-titanium alloy).

4. (Previously Presented) The stylet of claim 3, wherein the inner core is a pre-formed rod.

5. (Original) The stylet of claim 1, wherein the stylet is isodiametric.

6. (Previously Presented) The stylet of claim 5, wherein the inner core has a variable diameter along the length of the stylet.

7. (Currently Amended) The stylet of claim 5, wherein the outer covering has a substantially constant wall thickness along the length of the stylet from the handle to the distal end.

8. (Currently Amended) The stylet of claim l, wherein the stylet has a variable outer circumference along the length of said stylet from the handle to the distal end.

9. (Original) The style of claim 8, wherein the outer covering has a substantially constant wall thickness along the length of the stylet.

10. (Currently Amended) The stylet of claim 8, wherein the inner core has a substantially constant thickness along the length of the stylet from the handle to the distal end.

11. (Original) The stylet of claim l, wherein the inner core material is a super-elastic material, which inner core material is substantially more resistant to permanent bending deformation than the outer covering material; and wherein the outer covering material is a linear-elastic material, which outer covering material is substantially more resistant to buckling than the inner core material.

12. (Original) The stylet of claim 11, wherein the outer covering material is selected from the group consisting of cold drawn 304 stainless steel, 316 stainless steel, 316L stainless steel, and the inner core material is nitinol (425 nickel-titanium alloy).

13. (Previously Presented) The stylet of claim 1, wherein the outer covering defines a tube and the inner core is a pre-formed rod that has been pre-stressed so that the inner core operates on the compression side of the stress-strain curve.

14. (Withdrawn) A stylet for use with a medical stimulating lead, the stylet comprising:

an outer covering extending from a proximal end of the stylet to a distal tip of the stylet; and

a solid inner core, made of inner core material, inside the outer covering, the inner core having a solid lateral cross-section and disposed entirely within the outer covering,

wherein the outer covering is made of an outer metal covering material which is substantially more flexible than the inner core material;

wherein the inner core material is substantially more resistant to buckling than the outer covering material.

15. (Withdrawn) The stylet of claim 14, wherein the outer covering material is selected from the group consisting of cold drawn 304 stainless steel, 316 stainless steel, 316L stainless steel and nitinol (425 nickel-titanium alloy); and wherein the inner core material is selected from the group consisting of magnesia partially stabilized Zirconia, Yttria stabilized Zirconia, ceramic, epoxy, and hard polyurethane.

16. (Withdrawn) The stylet of claim 15, wherein the stylet is dimensioned for use in deep brain stimulation (DBS).

17. (Withdrawn) The stylet of claim 14, wherein the outer covering defines a tube, having a wall cross-section defining an annulus.

18. (Withdrawn) A stimulating lead system which is insertable into tissue more than once, said system comprising:

a stimulating lead, said lead having an inner lumen along its axial length; and

a stylet configured and dimensioned to fit inside said lumen,

wherein said stylet comprises:

a rounded distal tip;

an outer covering extending from a proximal end of the stylet to the distal tip of the stylet; and

a solid inner core material inside said outer covering, the inner core material

forming an inner core having a solid lateral cross-section and extending from the proximal end of the stylet to the distal tip of the stylet,

wherein the outer covering is made of an outer metal covering material which is substantially more flexible than the inner core material;

wherein the inner core material is substantially more resistant to buckling than the outer covering material.

19. (Withdrawn) The lead system of claim 18,

wherein the outer covering material is selected from the group consisting of cold drawn 304 stainless steel, 316 stainless steel, 316L stainless steel and nitinol (425 nickel-titanium alloy); and

wherein the inner core material is selected from the group consisting of magnesia partially stabilized Zirconia, Yttria stabilized Zirconia, ceramics, epoxy, and hard polyurethane.

20-21. (Cancelled).

22. (Currently Amended) The stylet of claim 6, wherein the stylet comprises a distal end and a proximal end, and wherein the diameter of the inner core increases along the length of the stylet from the ~~proximal end~~ handle to the distal end of the stylet.

23. (New) The stylet of claim 1, wherein the stylet has a solid lateral cross-section from the handle to the distal end of the stylet.